

APPENDIX C

Road System Analysis

Roads Analysis Report

Lower Williams River Abandoned Coal Mines and Road Restoration Project

GAULEY RANGER DISTRICT

INTRODUCTION

BACKGROUND

In August 1999, the Washington Office of the USDA Forest Service published Miscellaneous Report FS-643 titled "Roads Analysis: Informing Decisions about Managing the National Forest Transportation System". The objective of roads analysis is to provide decision makers with critical information to develop road systems that are safe and responsive to public needs and desires, are affordable and efficiently managed, have minimal negative ecological effects on the land, and are in balance with available funding for needed management actions.

In October 1999, the agency published Interim Directive 7710-99-1 authorizing units to use, as appropriate, the road analysis procedure outlined in FS-643 to assist land managers making major road management decisions.

PROCESS

Roads analysis is a six-step process, with the sixth step described as reporting of findings, which is this document and attached maps. The steps are designed to be sequential with the understanding the process may require feedback and iteration among steps over time as an analysis matures. The amount of time and effort spent on each step differs by project based on specific situations and available information. The process provides a set of possible issues and analysis questions for which the answers can inform choices about road system management. Decision makers and analysts determine the relevance of each question, incorporating public participation as deemed necessary.

PRODUCTS

The product of an analysis is a report for decision makers and the public that documents the information and analyses used to identify opportunities and set priorities for future national forest road systems. Included in a report is a map displaying the known road system for the analysis area, and the risks and opportunities for each road or segment of road. A report may also include other maps and tables necessary to display specific priorities and changes in a road system.

THIS REPORT

This report documents the roads analysis procedure used for the Lower Williams River Abandoned Coal Mines and Roads Rehabilitation project area. The project area is near Dyer, West Virginia and Three Forks of Williams River. Tributaries to the Williams River in the project area include: North Cove Run, Johnson Run, Lick Branch, Little Fork, and many unnamed tributaries. Forest Service system roads 429, 86, and 787 and several woods roads are within the project area.

STEP 1 – SETTING UP THE ANALYSIS

PURPOSE AND PRODUCTS

The purpose of this step is to:

- establish the level and type of decision making that the analysis will inform,
- identify the geographic scale or scales for the analysis,
- develop a process plan for conducting the analysis, and
- clarify the roles of technical specialists and line officers in the team.

The products of this step are:

a statement of the objectives of the analysis,

- a list of interdisciplinary team members and participants,
- a list of information needs, and
- a plan for the analysis.

OBJECTIVES

This analysis of the forest road system is made at the project scale for the Lower Williams River Abandoned Coal Mine and Road Restoration project. This analysis will address the current road system in the project area. The work proposed in the Lower Williams River Coal Mine and Road Restoration Environmental Assessment is to be completed in the immediate future, the next 3 years.

This analysis assesses the current road system in the Lower Williams River project area and the ways it affects other resources. Since there is a proposed action to modify the road system in the project area, this analysis will show the effects the proposed actions will have on the road system.

INTERDISCIPLINARY TEAM MEMBERS

Linda Tracy, Forest Geologist
Pat Kowalewycz, Gauley District Ranger
Melissa Thomas-Van Gundy, Natural Resource Specialist
Jacob D'Angelo, Transportation Planner
Laura Hise, Integrated Resource Analyst

INFORMATION NEEDS

This analysis will use existing data on roads in the project area based on deferred maintenance surveys and field visits to the project area to develop the proposed action.

ANALYSIS PLAN

This report documents the analysis of a small portion of the Forest road system to support decisions to be made in the Lower Williams River Abandoned Coal Mines and Roads Rehabilitation Environmental Assessment and Decision Notice.

Since this analysis is at the project level, the Natural resource specialist with input from the Geologist will conduct most of the analysis. The Transportation Planner and Assistant Forest Planner will serve as reviewers and technical experts. The District ranger is the deciding official for the subsequent NEPA documentation and will help determine the scope and intensity of this analysis.

STEP 2 – DESCRIBING THE SITUATION

PURPOSE AND PRODUCTS

The purpose of this step is to:

- describe the existing road system in relation to current forest plan direction.

The products of this step are:

- a map or other descriptions of the existing road and access system defined by the current forest plan or transportation plan, and
- basic data needed to address roads analysis issues and questions.

EXISTING ROAD SYSTEM DESCRIPTION

The analysis area includes abandoned coal mine sites and associated roads in the lower Williams River identified for rehabilitation and decommissioning. The mine sites are near Dyer, West Virginia and Three Forks of Williams River. Tributaries to the Williams River in the project area include: North Cove Run, Johnson Run, Lick Branch, Little Fork, and many unnamed tributaries. Forest Service system roads 429, 86, and 787 and several woods roads are within the project area.

Table 1 displays information on roads in the project area. The identifying numbers starting with “G” are from transportation planning maps in the engineering office. Forest road 429 was reconstructed in 1997 and 1998 and parts were previously known as FR920 or G-175. There is no bridge linking the haul road to mine #WV-0967S (G-174) to FR 86.

Roads in the project area range from unclassified abandoned travelways, also known as woods roads, to a section of four-season road running the entire length of the Williams River. Roads in the project area are used for gas well maintenance, timber harvest, recreation, and management of natural resources in general. Woods roads in the area were used for coal mine activities and timber hauling. The main recreation uses of the roads are hunting and fishing. System roads in the project area serve as access for land and resource management and access through the project area. FR86 is also County road 46/2 following almost the entire length of the Williams River from near Handley State Hunting and Fishing Area (in Pocahontas County) to Cowen and is a state designated Scenic Backway. Paving of the entire length of FR86 is planned and likely to occur within the next 3 years.

Table 1 – Resource Priorities for Roads and Road Segments in Project Area

Road #	Pvt. access	Currently closed	Close for remote habitat	Decommission for w-shed health	Improve for w-shed health	Maintain for summer motorized recreation	Important for winter motor recreation	Maintain for timber mgmt.	Maintain for gas access	Road length (miles)	Annual Maintenance cost per mile	Decommission cost per mile	Deferred Maint. cost per mile
G-174		X		H						5.5	0	\$15,000	0
Haul rd to MF1031 & beyond		X		H						1.0	0	\$15,000	0
G-220		X		H						0.2	0	\$15,000	0
G-172		X		H						1.4	0	\$15,000	0
G-223		X		H						0.5	0	\$15,000	0
G-176 (FR920)		X		H						2.0	0	\$15,000	0
FR429		X			M			M	H	3.7 (in project area)	NA	NA	NA
FR787		X			M			M	H	1.3 (in project area)	NA	NA	NA
FR86					H	H	M	H	H	1.1 (in project area)	NA	NA	NA

Rationale for Resource Management Priorities

Recreation use

H = High use (summer or winter); no alternative routes

M = Some current summer use (often seasonal); winter route with medium to heavy use

L = Closed; or low current use; or viable alternative route available

Timber Management

H = Collectors and arterials

M = Local roads

Gas Access

H = Important for access to improvements authorized under a special permit

Roads could be gated and open to permittees only.

M = Other routes are available for access to improvements

Watershed Decommission or Improve

H = Known problems such as erosion, rutting, or obvious groundwater interception

M = Less severe problems, or stable roads which could be decommissioned to reduce road density and impacts to streams and hydrology

L = Stable mid-slope roads which could be decommissioned (recontoured) to reduce the drainage effect and groundwater interruption or interception.

X = Roads which, due to location, have the potential to cause impacts to streams or watershed, usually at valley-bottoms or stream crossings.

Wildlife

H = Roads in Cheat Mountain salamander habitat; roads in high road density areas in MP6.1 areas

M = Fragmentation of general forested habitat

L = No known threatened or endangered species in area

STEP 3 – IDENTIFYING ISSUES

PURPOSE AND PRODUCTS

The purpose of this step is to:

- identify the key questions and issues affecting road-related management, and
- describe the origin of the issues.

The products of this step are:

- a summary of key road-related issues, including their origin and basis, presented by general categories of environmental, sociocultural and economic.

ISSUE SUMMARY

Public Comments

Public comment on the proposed action was requested by mail from interested individuals, groups, and agencies. A legal notice requesting comments was published in *The Nicholas Chronicle*. The project was also listed in the *NEPA Quarterly - Schedule of Proposed Actions* for the Forest. Nine people responded to the letter with comments on the proposed action. While comments were requested in response to the proposed action, not on the current road system in general, comments received can be applied to the road system.

The following comments were received from the public. Most comments are paraphrased.

- If there is a chance the mines may be reopened in area or if timber might be cut, keep the roads in place.
- Road repair should be cheaper than road obliteration.
- Sediment from roads is a primary threat to native and wild trout fisheries.
- All abandoned and derelict roads should be inventoried for obliteration when funding becomes available.
- Existing roads should be gated but not obliterated — for safety purposes/emergency access.
- Keep access for long-term monitoring of site pH and treatment of any acid impacted waters.
- Would proposed obliterated roads make good trail to connect with Cranberry Wilderness Area trail?
- Maintain administrative access to any development (including wildlife habitat) within project area.

These can be grouped into 3 issues:

- Future access in project area
- Roads as sediment sources and subsequent effects on aquatic resources
- Conversion of roads to trails

ENVIRONMENTAL ISSUES

Vegetation Management

FR 429, recently reconstructed, provides the main access to the project area for vegetation management. This is the only system road on the Williams River side of Red Oak Knob, giving access to approximately 5,000 acres of National Forest System lands. It is likely that future commercial timber management will use helicopter yarding to remove merchantable material, given soil types and the proximity to the Williams River.

For non-commercial vegetation management practices, such as non-commercial thinning, prescribed fire, vine control, planting, and maintenance of grassy openings, the system of woods roads provides walk-in access to much of the project area.

Watershed Improvement

With the reconstruction of FR429 to current standards for erosion control and culvert spacing, the main source of sediment to the Williams River from the road system is the system of unclassified, unmaintained, woods roads used for timber harvest and mine activities.

Wildlife

Roads can provide habitat for some wildlife species while creating a hazard or barrier for other species. Roads can provide access to maintain features of wildlife habitat (grassy openings, ponds). Generally speaking, each road needs to be assessed individually for its benefits and negative impacts to wildlife species.

The needs of threatened and endangered wildlife species must be addressed when looking at changes to the Forest road system.

SOCIAL ISSUES

Recreation

Most likely the main types of recreation in the project area are hunting and fishing. Other than FR86, all roads in the project area are gated or blocked. The woods roads are not drivable and provide only for foot travel.

There are foot trails connecting the project area to the adjacent Cranberry Wilderness Area.

Access to Private Lands

Only FR86 provides access to private lands.

ECONOMIC ISSUES

At this scale of analysis economic issues will not be a part of the decision to proceed with the project. The roadways proposed for decommissioning have not been maintained in decades. There are no savings of road maintenance costs associated with removing these roadways from the system. Road decommissioning costs are estimated at \$15,000 per mile. This is based on an average of this type of work over the past several years.

STEP 4 - ASSESSING BENEFITS, PROBLEMS, AND RISKS

PURPOSE AND PRODUCTS

The purpose of this step is to:

- assess the various benefits, problems, and risks of the current road system and whether the objectives of Forest Service policy reform and forest plans are being met.

The products of this step are:

- a synthesis of the benefits, problems, and risks of the current road system, and
- an assessment of the ability of the road system to meet objectives.

CURRENT ROAD SYSTEM BENEFITS, PROBLEMS, AND RISKS

Appendix 1 of Forest Service publication FS-643, Roads Analysis, includes questions as a basis for assessing the benefits, problems, and risks associated with roads in an analysis area. Essentially, answering these questions helps describe why the roads exist and any interactions between the road system and other resources. Table 2 displays the questions and the discussion pertinent to the project area.

While the project area includes a small segment of the Forest road system, there is a wide range of road types found. The road system consists of roads or road segments from grassed over skid trails to a one and a half lane gravel road, plowed for year-round use. This makes answering these questions difficult. In some cases the question is addressed in the effects section of the Lower Williams River Abandoned Coal Mine and Road Rehabilitation EA.

The project area includes lands assigned to management prescriptions 2.0, 6.1, and 3.0. These management prescriptions allow road construction with varying allowable densities. The Land and Resource Management Plan (Forest Plan) for the Monongahela National Forest gives the following general direction for road management:

- Forest Service will provide road developments to the density and standard needed to meet resource and use objectives. These standards will be determined after consideration for the purpose of the road, the type of vehicles expected, the duration and frequency of use, and necessary environmental protection measures. (Page 99)
- Existing roads not needed for future management or motorized use will be removed from the transportation plan and abandoned. (Page 99)

The proposed road decommissioning is needed to reduce sediment movement into the Williams River and its tributaries. Drainage structures on these roads have failed and water is causing erosion of road fill as it leaves the road surface. All roads proposed for decommissioning have had little to no maintenance in recent years. Many road segments have not been maintained or used in decades. Part of road segment G-174 was used recently to access a timber sale unit in the Johnson Run drainage. This road was used as a temporary haul road. Tree canopy has closed over most unclassified woods road segments in the project area, except for the piece used most recently as a temporary haul road. Most unclassified woods road segments also have sapling to pole sized trees growing on the road surface. This level of use and maintenance is further proof that these roads are not needed for management of the project area, or are not in the right place for management.

ABILITY OF THE ROAD SYSTEM TO MEET OBJECTIVES

The current road system of classified, maintained roads meets the Forest Plan objectives for the project area. Existing, unmaintained, unclassified woods roads are allowing sediment to enter the Williams River and are not needed for future management.

Table 2 – Resource Assessment Questions

Question	Discussion or Citation
AQ(1): How and where does the road system modify the surface and subsurface hydrology of the area?	Due to moist soil conditions and drainage patterns in the project area, the entire length of any road intercepts sub-surface flow.
AQ(2): How and where does the road system generate surface erosion?	Failing ditches and inadequate drainage structures have created sources of erosion along the length of all woods roads in the project area. Maintained system roads (FR 429, FR 787, and FR 86/County 46/2) have much less potential to generate surface erosion.
AQ(3): How and where does the road system affect mass wasting?	
AQ(4): How and where do road-stream crossings influence local stream channels and water quality?	Failing ditches and inadequate drainage structures make each stream crossing a potential source of sediment affecting stream channel morphology and water quality.
AQ(5): How and where does the road system create potential for pollutants, such as chemical spills, oils, deicing salts, or herbicides, to enter surface waters?	Not applicable at this scale.
AQ(6): How and where is the road system “hydrologically connected” to the stream system? How do the connections affect water quality and quantity?	Every stream channel crossing connects a road to the hydrologic system.
AQ(7): What downstream beneficial uses of water exist in the area? What changes in use and demand are expected over time? How are they affected or put at risk by road-derived pollutants?	Fishing is a major recreation use of the Williams River.
AQ(8): How and where does the road system affect wetlands?	Much of FR86 is in the floodplain of the Williams River.
AQ(9): How does the road system alter physical channel dynamics, including isolation of floodplains, constraints on channel migration, and the movement of large wood, fine organic matter, and sedimentation?	Much of FR86 is in the floodplain of the Williams River.
AQ(10): How and where does the road system restrict the migration and movement of aquatic organisms? What aquatic species (i.e., fish and amphibians) are affected and to what extent?	None known in this project area.
AQ(11): How does the road system affect shading, litter fall, and riparian plant communities?	Not applicable at this scale.
AQ(12): How and where does the road system contribute to fishing, poaching or direct habitat loss for at-risk aquatic species?	FR86 allows access to almost the entire length of the Williams River and is a popular spot for anglers.
AQ(13): How and where does the road system facilitate the introduction of non-native aquatic species?	FR86 allows access to almost the entire length of the Williams River.
AQ(14): To what extent does the road system overlap with areas of exceptionally high aquatic diversity or productivity or areas containing rare or unique aquatic species or species of interest?	The Williams River is habitat for aquatic species of interest. The project area is in the Williams River watershed, but represents a small portion.
TW(1): What are direct effects of the road system on terrestrial	See the Biological Evaluation for this project.

Question	Discussion or Citation
species habitat?	
TW(2): How does the road system facilitate human activities that affect habitat?	FR86 allows for year-round access to a large section of the Forest.
TW(3): How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the effects on wildlife species?	Not applicable at this scale; however FR86 does access a large amount of national forest land.
TW(4): How does the road system directly affect unique communities or special features in the area?	See the Biological Evaluation for this project.
EF(1): What ecological attributes, particularly those unique to the region, would be affected by roading of currently unroaded areas?	No roadless areas in project area.
EF(2): To what degree does the presence, type, and location of roads increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? What are the potential effects of such introduction to plant and animal species and ecosystem function in the area?	Not applicable at this scale.
EF(3): To what degree does the presence, type, and location of roads contribute to the control of insects, diseases, and parasites?	As part of the overall forest road system, the system roads provide access.
EF(4): How does the road system affect ecological disturbance regimes in the area?	Not applicable at this scale.
EF(5): What are the adverse effects of noise caused by developing, using, and maintaining roads?	Not applicable at this scale and use level.
EC(1): How does the road system affect the Agency's direct costs and direct revenues used in assessing financial efficiency?	Not applicable at this scale.
EC(2): How does the road system affect the priced and non-priced consequences included in economic efficiency analysis used to assess net benefits to society?	Not applicable at the scale of this project.
EC(3): How does the road system affect the distribution of benefits and costs among affected people?	Not applicable at this scale or for this project.
TM(1): How does the road spacing and location affect logging system feasibility?	If the planned road decommissioning is completed, much of the project area will be considered for helicopter logging if timber harvest is proposed in the future.
TM(2) and TM(3): How does the road system affect managing the suitable timber base? How does the road system affect access to timber stands needing silvicultural treatment?	Currently, roads in the project area identified for decommissioning are in poor shape and would need significant reconstruction for use as timber haul roads. FR429 could be used to access the area. If the roads proposed for decommissioning are decommissioned, access will not change because the roads are not serving that purpose now.
MM(1): How does the road system affect access to locatable, leasable, and salable minerals?	Mineral rights in the project area are held by western Pocahontas Properties.
RM(1): How does the road system affect access to range allotments?	Not applicable; no range allotments in project area.
WP(1): How does the road system affect access, construction,	No such developments in project area or planned in near future.

Question	Discussion or Citation
maintenance, monitoring, and operation of water diversion, impoundments, and distribution canals or pipes?	
WP(2): How does road development and use affect water quality in municipal watersheds?	No municipal watersheds in project area.
WP(3): How does the road system affect access to hydroelectric power generation?	Not applicable, no hydroelectric power developments in project area.
SP(1): How does the road system affect access for collecting special forest products?	FR86/County road 46/2 is one of a few roads that runs through a large section of the National Forest and is open year-round.
SU(1): How does the road system affect managing special-use permit sites (concessionaires, communications sites, utility corridors, and so on)?	Not applicable at this scale, however FR 86 allows for access to a large amount of the national forest.
GT(1): How does the road system connect to public roads and provide primary access to communities?	FR 86 becomes County road 46/2. This road is a State designated Scenic Backways.
GT(2): How does the road system connect large blocks of land in other ownership to public roads (ad-hoc communities, subdivisions, inholdings, and so on)?	FR 86 becomes County road 46/2.
GT(3): How does the road system affect managing roads with shared ownership or with limited jurisdiction? (RS 2477, cost-share, prescriptive rights, FLPMA easements, FRTA easements, COT easements)?	Not applicable, no shared ownership in project area.
GT(4): How does the road system address the safety of road users?	FR 86 is the only road in the project area open year round and is plowed in the winter. There are adequate pullouts are along FR86.
AU(1): How does the road system affect access needed for research activities, inventory, and monitoring?	Not applicable at this scale, however FR 86 allows for access to a large amount of the national forest.
AU(2): How does the road system affect investigative or enforcement activities?	Not applicable at this scale, however FR 86 allows for access to a large amount of the national forest.
PT(1): How does the road system affect fuels management?	Not applicable. Project area is generally not at risk for fire because of moist forest conditions. Fuel management not an issue in project area.
PT(2): How does the road system affect the capacity of the Forest Service and cooperators to suppress wildfires?	Not applicable. Project area is generally not at risk for fire because of moist forest conditions.
PT(3): How does the road system affect risk to fire fighters and to public safety?	Not applicable. Project area is generally not at risk for fire because of moist forest conditions.
PT(4): How does the road system contribute to airborne dust emissions resulting in reduced visibility and health concerns?	Not applicable at this scale.
UR(1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?	Not applicable at this scale.
UR(2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or	Not applicable at this scale. Existing roads will be decommissioned, but at this scale no substantial change is made.

Question	Discussion or Citation
type of unroaded recreation opportunities?	
UR(3): What are the adverse effects of noise and other disturbance caused by developing, using, and maintaining roads, on the quantity, quality, and type of unroaded recreation opportunities?	No unroaded areas in project area. Project area is adjacent to Cranberry Wilderness, decommissioned roads near wilderness boundary will slightly increase unroaded area.
UR(4): Who participates in unroaded recreation in the areas affected by building, maintaining, and decommissioning roads?	No unroaded areas in project area.
UR(5): What are these participant's attachments to the area, how strong are there feelings, and are alternative opportunities and locations available?	No unroaded areas in project area.
UR(6): How is developing new roads in unroaded areas affecting the Visual Quality Objective (VQO)?	No unroaded areas in project area.
RR(1): Is there now or will there be in the future excess supply or excess demand for road-related recreation opportunities?	Not appropriate at this scale.
RR(2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing maintenance of existing roads causing substantial changes in the quantity, quality, or type of road-related recreation opportunities?	The roads proposed for decommissioning are largely impassible by passenger vehicle, so road related recreation will be unaffected by their decommission.
RR(3): What are the adverse effects of noise and other disturbances caused by building, using, and maintaining roads on the quantity, quality, or type of roaded recreation opportunities?	Not applicable at this scale.
RR(4): Who participates in road-related recreation in the areas affected by road building, changes in maintenance, or road decommissioning?	Hunters, anglers, hikers, mountain bikers, and sightseers.
RR(5): What are these participant's attachments to the area, how strong are there feelings, and are alternative opportunities and locations available?	Public responses to the proposed action show a concern for continued access to the project area and future access needs for developments and resource management. Considering the condition of most of the woods roads proposed for decommissioning, other existing roads would continue to serve as the main access to the project area. FR86 is a State designated Scenic Backways.
RR(6): How does the road system affect the Visual Quality Objective?	The road system meets the VQO assigned to the various management prescriptions in the project area.
PV(1): Do areas planned for road building, closure, or decommissioning have unique physical or biological characteristics, such as unique natural features or threatened or endangered species (see TW(4))?	Not applicable at this scale.
PV(2): Do areas planned for road building, closure, or decommissioning have unique cultural, traditional, symbolic, sacred, spiritual, or religious significance?	Not applicable at this scale.
PV(3): What, if any, groups of people (ethnic groups, subcultures, etc.) hold cultural, symbolic, spiritual, sacred, traditional, or religious	Not applicable at this scale.

Question	Discussion or Citation
values for areas planned for road entry or road closure?	
PV(4): Will building, closing, or decommissioning roads substantially affect passive-use value?	Not applicable at this scale.
SI(1): What are people's perceived needs and values for roads? How does road management affect people's dependence on, need for, and desire for roads?	See public comments. Roads provide access and should be reconstructed not obliterated.
SI(2): What are people's perceived needs and values for access? How does road management affect people's dependence on, need for, and desire for access?	Roads needed for future management activities (timber, minerals) and for emergency access.
SI(3): How does the road system affect access to paleontological, archeological, and historical sites?	Not applicable at this scale.
SI(4): How does the road system affect cultural and traditional uses (such as plant gathering, and access to traditional and cultural sites) and American Indian treaty rights?	No American Indian treaty rights in project area. FR86 allows year-round access to a large section of the forest for traditional uses such as plant gathering, hunting, and fishing.
SI(5): How are roads that constitute historic sites affected by road management?	No roads considered historic sites in the project area.
SI(6): How are community, social, and economic health affected by road management (for example, lifestyles, businesses, tourism industry, infrastructure maintenance)?	Not applicable at this scale.
SI(7): What is the perceived social and economic dependence of a community on an unroaded area versus the value of that unroaded area for its intrinsic existence and symbolic values?	No unroaded areas in project area.
SI(8): How does road management affect wilderness attributes, including natural integrity, natural appearance, opportunities for solitude, and opportunities for primitive recreation?	Not applicable at this scale, however FR86 does lie along the boundary of the Cranberry Wilderness outside the project area.
SI(9): What are traditional uses of animal and plant species in the area of analysis?	Anglers and hunters use the road system, either driving or walking.
SI(10): How does road management affect people's sense of place?	In general, the local public wants roads to be open for vehicle access.
CR(1): How does the road system, or its management, affect certain groups of people (minority, ethnic, racial, disabled, and low-income groups)?	Not applicable at this scale.

STEP 5 – DESCRIBING OPPORTUNITIES AND PRIORITIES

PURPOSE AND PRODUCTS

The purpose of this step is to:

- compare the current road system with what is desirable or acceptable, and
- describe options for modifying the road system that would achieve desirable or acceptable conditions.

The products of this step are:

- a map and descriptive ranking of the problems and risks posed by the current road system,
- a map and list of opportunities, by priority, for addressing important problems and risks, and
- a prioritized list of specific actions, projects, or forest plan adjustments requiring NEPA analysis.

PROBLEMS AND RISKS POSED BY THE CURRENT ROAD SYSTEM

Existing unmaintained woods roads are creating sediment sources. See Table 2 for more details.

OPPORTUNITIES FOR ADDRESSING IMPORTANT PROBLEMS AND RISKS

As described in the Lower Williams River Abandoned Coal Mines and Road Restoration EA, there are approximately 11.2 miles of road where action is needed to stabilize the road surfaces and decommission roads.

Specifically road restoration activities would occur in the following areas (distances are approximate):

- WV-0967 north side of Williams River (G-223) - 0.5 miles
- WV-0967 south side of Williams River (G-174) - 0.5 miles
- MF-1031 access road - 0.6 miles
- MF-1032 access road (G-220) - 0.2 miles
- MF-1039 access road - 0.1 miles
- East from Forest Road 429 across Johnson Run near elevation 2400 feet, Lick Branch near elevation 2900 feet to MF-1038 (G-174) – 5.5 miles
- Several hundred feet of mine access trail to MF-1036.
- Approximately 100 feet of mine access trail to mine site MF-1037 adjacent to Forest Road 787.
- Woods road in Lick Branch to Little Fork drainages in the area near elevation 2450 feet to 2650 feet (G-176) – 2.0 miles
- Woods roads near the North Cove Run drainage that extend to the west of mine site MF-1032 (G-172) – 1.4 miles, and mine site MF-1031 – 0.4 miles

The roads will be used to access some mines sites to install gates on portals and stabilize drainage. Closure work needed to consider the woods roads decommissioned would happen after the mine site work. These actions are contingent on the completion of the Lower Williams River Abandoned Coal Mine and Road Restoration EA and decision notice since this roads analysis is not a decision document.

This work is high priority for the Forest because the lower Williams River watershed contains the largest concentration of abandoned coal mines with cumulatively the greatest risk to public safety and water quality within the same sub-basin (6th order watershed) in the Forest. The Williams River, a State designated, high quality stream, is a tributary to the Gauley River a Priority 1 watershed under the Unified Watershed Assessment.

NEPA ANALYSIS NEEDS

An environmental assessment (EA) is being prepared for proposed work to stabilize and decommission roads in the Lower Williams River project area. Approximately 7.4 miles of roads directly associated with old coal mine sites, and 3.8 miles of unclassified roads, are proposed for stabilization and decommissioning. To stabilize and close the roads drainage structures would be removed or otherwise redesigned to disperse flows and natural drainage patterns would be re-established. On some roads waterbars would be constructed, ditches obliterated, and the road surface out sloped where appropriate. All bare soil would be revegetated with non-aggressive, native genera that meet erosion control and wildlife needs.